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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,086	07/28/2003	Byung-Woong Han	21C-0079	5970

7590 03/30/2005  
CANTOR COLBURN LLP  
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EXAMINER

VO, TUYET THI

ART UNIT PAPER NUMBER

2821

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/629,086

Applicant(s)

HAN ET AL.

Examiner

Tuyet Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4, 7-10, 12-17, 22-24 and 26-30 is/are rejected.  
7) ☒ Claim(s) 5, 6, 11, 18-21 and 23-25 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

Applicant's amendment filed January 31, 2005 with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 12-17, 26, 27, 29 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Yajima et al. (US Pub. 2002/0041268), hereinafter Yajima.

Regarding claims 1-3 and 12-17, 29 and 30, Yajima discloses a backlight assembly (Figs. 1-13) for a liquid crystal display (LCD) device having a display panel that includes a liquid crystal layer ([0064]) interposed between a first and second substrates (1A, 1B) and the backlight assembly comprising:

a light source (35), deposited on a light-receiving container (500, 800), that generates a first light;

a light-distribution changing member including a diffuser (50) and plurality of diffusing/optical sheets (52), wherein the diffuser the first light exiting from the light source, and

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a plurality of optical/diffusing sheets (52) disposed over the diffuser (50) and enhancing a luminance of a second light existing from the diffuser; and

an electromagnetic-wave shielding member (51) comprising a conductive metal mesh shape ([0180]) as pattern, **wherein the conductive metal mesh shape is inherently formed by a number of conductive lines**, and formed on the surface of the diffuser (50) for shielding an electromagnetic wave generated from an electric power applied to the light source from the image display part ([0183]).

Regarding claims 26 and 27, Yajima further discloses an electromagnetic-wave shielding member (51) formed by a conductive metal ([0180], [0185]) directs contact to a container/chassis/sidewall (500, 800) to be connected to an earth potential (Fig. 8A), wherein the electromagnetic-wave shielding member (51) connects to the container/chassis/sidewall (500, 800) via conductive material/member (50, see Fig. 13).

3. Claims 1, 15 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (US Pat. 5,333,073).

Suzuki discloses a backlight assembly (Figs. 1-3, 5 and 7) for back lighting a liquid crystal display device, comprising:

a light source (1) that generates a first light;

a light distribution changing member (2) that changes an optical distribution of the first light; and

an electromagnetic-wave shielding member (5) that shields an electromagnetic wave generated from an electric power applied to the light source, wherein the electromagnetic-wave shielding member including shielding lines (7) arranged as pattern.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yajima in view of Okada et al. (US Pub. 2002/0153149), hereinafter Okada.

Yajima discloses substantially the claim invention as noted above, in that, the shielding member comprising shielding lines to form a mesh shape. However, the mesh shape is not clearly defined/formed by first shielding lines perpendicular to each of second shielding lines.

Okada discloses an electromagnetic wave shielding member for plasma display panel, wherein the shielding member includes first shielding lines perpendicular to each of second shielding lines (Fig. 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the structure of electromagnetic shielding member as taught by Okada in order to improve a light transmission properties and reduce optical distortion as the light transmitted via open sections of the shielding member, surrounded by shielding lines, while preventing electromagnetic wave generated from light sources.

6. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yakima in view of Takahashi et al. (US Pub. 2004/0074655), hereinafter Takahashi.

Yakima discloses substantially the claim invention as noted above except for comprising a transparent organic protecting film that protects the electromagnetic wave shielding member.

Takahashi discloses a transparent organic protecting film (1, 61) that protects the electromagnetic wave shielding member 6 ([0001], [0094], [1041]).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the transparent organic protecting film to protect electromagnetic wave shielding member as taught by Takahashi into the Yakima backlighting system in order to extend the lifetime of the electromagnetic wave shielding member for enhancing any damage or problem due to effect of electromagnetic radiation.

7. Claims 10, 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yakima.

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Regarding claims 10 and 22, Yakima discloses substantially the claim invention as noted above in that the conductive electromagnetic wave shielding member is not limited in a selected metal material group such as copper, chromium or the like as claim invention.

It would have been an obvious matter of design choice for choosing any one type of metal group for forming an electromagnetic wave shielding member as long as it provides electrical/mechanical characteristics/function as desired. Such implementation is considered as a routine skill in the art.

Regarding claim 28, Yakima discloses substantially the claim invention as noted above except for explicitly mentioning a fixing conductive member that fixes/holds the connection member to the container and leave it up to skill in the art to utilize any mean/material for connecting of that in order to secure an overall backlight system assembled in a compact manner. Such implementation is considered as a routine skill in the art.

#### ***Allowable Subject Matter***

8. Claims 5, 6, 11, 18-21 and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the prior fails to disclose a specific structure of the electromagnetic-wave shielding member that includes a plurality of first shielding lines crossing a plurality of second shielding lines as required in claims 4 and 18. The prior art also lacks to implement the electromagnetic shielding member inserted into a groove formed on the surface of the diffuser as required in claims 11 and 23 or the light-distribution changing member further includes a complementary diffuser disposed between the diffuser and the optical sheet for diffusing the second light as required in claim 24.

#### ***Correspondence***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

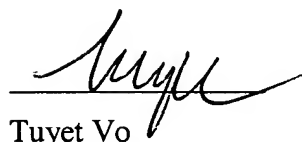
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toyed Vo whose telephone number is 571 272 1830. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571 272 1834. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.



Tuyet Vo

Primary Examiner

March 25, 2005